Abstract of the Disclosure

There is provided herein a system for reducing artifacts associated with multi-threaded video coding. The system generates a virtual thread from the multi-threaded data. The virtual thread combines the multi-thread data with estimates of virtual thread data in a manner that variably weights the combination according to motion information decoded from the multi-thread. A post-processing system is described that generates a single, virtual thread of video data, based upon image and motion data from a plurality of different threads in a multi-threaded video stream. The system estimates motion vectors for the virtual thread, generates frames of estimated video data, and applies the estimated frames to a filter. The filter generates an output that combines each new estimated frame with the current reference frame on a pixel-by-pixel basis. Pixel values generated by the filter are weighted between the values of the estimated frame and the current reference frame in a manner that brings an error function for the pixels below a threshold that may vary according to a degree of motion present in the plurality of different threads.